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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/608,653

Applicant(s)

MORAIS ET AL.

Examiner

Zachary A. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16,18-23 and 61-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16,18-23 and 61-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

1. A response was received on 08 November 2007. By this response, Claims 62-68 and 71-74 have been amended. Claims 1, 3, 8-15, 24-35, and 60 have been canceled. No new claims have been added. Claims 16, 18-23, and 61-74 are currently pending in the present application.

Election/Restrictions

2. Applicant's election without traverse of Group II, Claims 16, 18-23, and 61-74, in the reply filed on 08 November 2007 is acknowledged.

3. As noted above, Applicant has canceled the nonelected Claims 1, 3, 8-15, 24-35, and 60. See also MPEP § 818.02(c) regarding election by optional cancellation of claims.

Response to Arguments

4. Applicant's arguments filed 30 July 2007 have been fully considered but they are not persuasive.

Claims 16-23 and canceled Claims 36-44 and 50-54 were rejected under 35 U.S.C. 103(a) as unpatentable over Newcombe, US Patent Application Publication 2003/0172269, in view of Chang et al, US Patent 6952781.

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Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Specifically, with regard to Claim 16, Applicant alleges that neither Newcombe nor Chang discloses storing a portion of client specific data in a second cache along with an indication that the data do not correspond to a valid client (see pages 31-33 of the present response). Similarly, Applicant alleges that neither Newcombe nor Chang discloses similar limitations recited in Claim 61 (pages 34-35 of the present response); that neither Newcombe nor Chang discloses similar limitations recited in Claim 70 (pages 39-40 of the present response); and that Newcombe does not disclose virtually the entirety of Claim 69 (pages 36-38 of the present response). However, Applicant provides no evidence in support of these allegations. The Examiner notes that portions of both the Newcombe and Chang limitations were relied upon for similar limitations that were recited in canceled Claims 17 and 39 (see Newcombe, paragraphs 0063-0064, 0025, 0042, and 0047-0048; and Chang, column 4, lines 17-24; column 6, lines 2-3 and 47-50), and Applicant has not provided any discussion addressing those portions.

Therefore, for the reasons detailed above, the Examiner maintains the rejection as set forth below (or sets forth new grounds of rejection for the new claims as appropriate).

Drawings

5. The drawings are objected to because in each of Figures 5, 6, and 7, it is not clear that the first two steps in each flow chart (i.e. 505 and 510; 605 and 610; and 705 and 710 respectively) are performed at different locations, as described in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. Although the informality noted in the previous Office action has been corrected, the objection to the disclosure is NOT withdrawn, due to the further issues noted below.

7. The disclosure is objected to because of the following informalities:

The specification includes minor typographical and other errors. For example, on page 2, paragraph 0003, in the phrase "there are needs to verify user identity and to preserve secrecy with respect to information and access to information", it is not clear what the phrase "access to information" is intended to be coordinated with. On page 4, paragraph 0008, line 6 of the paragraph, it appears that "a" should be inserted between "in" and "need". On page 5, paragraph 0009, it is not clear what facilities the phrase "such facilities" refers to. On page 11, paragraph 0029, it appears that what are referred to as "hash algorithms" are in fact MAC algorithms; the hash algorithms on which those MACs are based are MD5 and SHA-1, respectively. Also on page 11, paragraph 0029, and elsewhere in the specification, the term "cachekey" is used in line 14 of the paragraph; however, this term has no common definition and also does not appear to be defined in the specification (see also page 17, paragraph 0050; page 20, paragraphs 0061 and 0063, and elsewhere). On page 20, paragraph 0061, in the phrase "Copies of all client names and keys are all valid principals are stored in the cache", there appears to be missing language. On page 20, paragraph 0064, in the phrase "the process 500 determines when the client name corresponds to a valid entry", it appears that "when" is intended to read "whether". Similarly, on page 21, paragraph

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0067, in the phrase "to determine when the client specific data... meet a first threshold", it appears that "when" is intended to read "whether". On page 21, paragraph 0068, in the phrase "the query task 535 determines that such matches the data", it is not clear what the antecedent of the word "such" is intended to be. On page 23, paragraph 0076, in the phrase "the process 600 determines when the primary cache 155 contains an entry", it appears that "when" is intended to read "whether". On page 24, paragraph 0079, it is not clear what the antecedent of either instance of the term "such" is intended to be; further, it appears that in the phrase "such do not match", it appears that "do" may be intended to read "does" for agreement in number, dependent on what the antecedent of "such" is intended to be. On page 27, paragraph 0092, again, in the phrase "the process 700 determines when the primary cache 155 contains an entry", it appears that "when" is intended to read "whether". On page 28, paragraph 0095, again, it is not clear what the antecedent of either instance of the term "such" is intended to be; further, it appears that in the phrase "such do not match", it appears that "do" may be intended to read "does" for agreement in number, dependent on what the antecedent of "such" is intended to be. On page 32, paragraph 0111, in the phrase "the process 700 determines when the NameHash corresponds to an entry", it appears that "when" is intended to read "whether", and on page 33, paragraph 0115, in the phrase "to determine when the client specific data meet a first threshold", it again appears that "when" is intended to read "whether". On page 33, paragraph 0116, again, it is not clear what the antecedent of either instance of the term "such" is intended to be; further, it appears that in the phrase "such do not match", it appears that "do" may be intended to

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read "does" for agreement in number, dependent on what the antecedent of "such" is intended to be. On page 34, paragraph 0121, again, in the phrase "the process 800 determines when a database entry... was found", it appears that "when" is intended to read "whether".

Appropriate correction is required. The above is not to be considered an exhaustive list of errors in the disclosure. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

8. The objection to Claim 8 for informalities is moot in light of the cancellation of the claim.

9. Claims 16, 18, 22, 23, 61, 63, and 68-74 are objected to because of the following informalities:

Claim 16 recites the limitation "to determine that the client specific data meet a first threshold" in lines 7-8. It appears that "that" is intended to read "whether" or "if". Also, in line 15, it appears that "a second cache memory" may be intended to read "the second cache memory" if this is intended to refer to the same second cache memory as in line 13.

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Claim 18 recites the limitation "a second cache memory" in lines 3-4; if this is intended to refer to the same second cache memory of Claim 16, it appears that this should read "the second cache memory". Claim 18 also recites the limitation "to determine when the client specific data meet a second threshold of validity and when the client specific data correspond to an identity previously determined to be valid or invalid" in lines 4-6. It appears that both instances of the word "when" are intended to read "whether".

Claim 22 recites "a first cache memory" in line 2; it appears that this should read "the first cache memory" if this is intended to refer to the same cache memory recited in Claim 16.

Claim 23 recites the limitation "determining when the received current time disagrees with another current time" in lines 3-4. It appears that "when" is intended to read "whether". The claim also recites "the another current time" in lines 5 and 6; it appears that is intended to read "the other current time".

Claim 61 recites the limitation "a first cache memory" in lines 7-8. It appears that this may be intended to refer to the "primary cache memory" recited in line 3. The claim also recites the limitation "to determine that the client specific data meet a first threshold" in lines 8-9. It appears that "that" is intended to read "whether" or "if". The claim further recites the limitation "to determine when the client specific data meet a second threshold of validity and when the client specific data correspond to an identity previously determined to be valid or invalid" in lines 17-20. It appears that both instances of the word "when" are intended to read "whether". Additionally, the claim

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recites the terms "proceed" in line 11, "terminate" in line 14, "transmit" in line 22, and "terminate" in line 25. It is not entirely clear what the subject of these is intended to be, although it appears that each of these is intended as another action that the authentication server is configured to perform (see line 4).

Claim 63 recites the limitation "a second cache memory" in line 3; if this is intended to refer to the same second cache memory of Claim 61, it appears that this should read "the second cache memory".

Claim 68 recites the limitation "to determine when the received current time disagrees with another current time" in lines 3-4. It appears that "when" is intended to read "whether". The claim also recites "the another current time" in lines 6 and 7; it appears that is intended to read "the other current time".

Claim 69 recites "some proof of knowledge" in line 6. It appears that this should read simply "proof of knowledge" or "a proof of knowledge" or similar; use of the potentially indefinite term "some" should be avoided. The claim also recites the limitation "to determine that the client specific data meet a first threshold" in lines 8-9. It appears that "that" is intended to read "whether" or "if".

Claim 70 recites the limitation "a second cache memory" in line 17. It appears that this may be intended to read "the second cache memory" if this is intended to refer to the same second cache memory as in line 15.

Claim 71 recites "a second cache memory" in lines 3-4. It appears that this may be intended to read "the second cache memory" if this is intended to refer to the same second cache memory as in Claim 70.

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Claim 72 recites "a second cache memory" in line 4. It appears that this may be intended to read "the second cache memory" if this is intended to refer to the same second cache memory as in Claim 70.

Claim 73 recites "a second cache memory" in line 4. It appears that this may be intended to read "the second cache memory" if this is intended to refer to the same second cache memory as in Claim 70.

Claim 74 recites "a first cache memory" in line 4. It appears that this may be intended to read "the first cache memory" if this is intended to refer to the same first cache memory as in Claim 70.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

10. The rejection of Claims 29-36 under 35 U.S.C. 101 is moot in light of the cancellation of the claims.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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12. Claims 62 and 69-74 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

A determination of a failure to comply with the enablement requirement is made considering the undue experimentation factors set forth in MPEP § 2164.01(a). The factors that appear to weigh most heavily in the present application are the amount of direction provided by the inventor (MPEP § 2164.03), the existence of working examples (MPEP § 2164.02), and the state of the prior art (MPEP § 2164.05(a)). Specifically, each of Claims 62 (line 3), 70 (line 9), and 72-74 (line 3 of Claims 72 and 73; line 2 of Claim 74) recite the term "cachekey". Claim 69 also recites "cashekey" in line 11; it appears that this is intended to refer to the same concept. It appears that the term "cachekey" does not have a definition in the art. Further, although the term appears several times throughout the present specification (see, for example, page 11, paragraph 0029), the term does not appear to have been explicitly defined anywhere in the specification, which suggests that there is little direction provided by the inventor. The only examples in the specification are extremely vague; the examples merely state that various values may be used as a cachekey (for example, page 11, paragraph 0029). All of the above suggests that the enablement of the description is not commensurate in scope with the claims (MPEP § 2164.08) and that undue

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experimentation would be required to make or use the invention based on the disclosure (MPEP § 2164.06).

Claim 71 is rejected due to its dependence on rejected Claim 70.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 61-74 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 61 recites the limitation "the second cache memory" in line 17. There is insufficient antecedent basis for this limitation in the claim.

Claims 62 (line 3), 70 (line 9), and 72-74 (line 3 of Claims 72 and 73, line 2 of Claim 74) each recite the term "cachekey". However, this term is not known to have a definition in the art, nor is it explicitly defined in the specification. This renders the use of the term indefinite. Claim 69 also recites "cashekey" in line 11; it appears that this may also be intended to refer to the same undefined concept.

Claim 63 recites the limitation "at least some of the client specific data" in line 3. The word "some" by definition refers to an indefinite quantity, and therefore does not define a clear number or range.

Claim 69 further recites the limitation "storing the name and the client key in a second cache memory along validity/invalidity indicators". The use of the term "along"

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is generally unclear, as it is not clear how the name and key would be stored along indicators.

Claims not specifically referred to above are rejected due to their dependence on a rejected base claim.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 16, 18-23, and 61-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newcombe, US Patent Application Publication 2003/0172269, in view of Chang et al, US Patent 6952781.

In reference to Claim 16, Newcombe discloses a process for verification of a client authentication request by a server, where the method includes receiving, in the server, a client authentication request that includes client specific data (paragraphs 0025, 0056-0057, 0067); comparing the client specific data to stored data to determine whether the client specific data meet a first threshold of validity and proceeding with or terminating the procedure based on the determination (paragraphs 0063-0064; one or more content servers). However, Newcombe does not explicitly disclose the use of a cache memory.

Chang discloses a process for verification in which the system uses a cache memory (column 4, lines 17-24; column 6, lines 2-3). Chang further discloses that when it is determined that the client specific data meet the first threshold of validity, the authentication process proceeds (column 4, lines 25-39, where client data must pass AAA server before proceeding to network access server); and when it is determined that the client specific data do not meet the first threshold of validity, a portion of the client specific data is stored in a second cache memory along with an indication that the client specific data do not correspond to a valid client (column 4, lines 17-24; column 6, lines 2-3 and 47-50) and the verification process terminates (column 6, lines 47-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Newcombe's method of authentication by including a cache memory and a first threshold of validity to in order to streamline user validation without requiring the user to enter identification a second time (Chang, column 2, lines 55-63; column 3, lines 8-19).

In reference to Claim 18, Newcombe and Chang further disclose comparing the client specific data with data stored in a second cache memory to determine when the client specific data meet a second threshold of validity and when the client specific data correspond to an identity previously determined to be valid or invalid (Newcombe, paragraphs 0025, 0063-0064; Chang, column 4, lines 17-24; column 6, lines 2-3 and 47-50); transmitting a request for verification to a database containing client-specific data when the client specific data meet the second threshold (Newcombe, paragraphs 0042, 0059, 0061-0062); and terminating the authentication request when the client

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specific data correspond to an identity previously determined to be invalid (Chang, column 6, lines 47-50).

In reference to Claim 19, Newcombe and Chang further disclose receiving data including one or more of: a name, a NameHash, a truncation of a NameHash, a NameKeyHash, a truncation of a NameKeyHash, a TimedNameKeyHash, a truncation of a TimedNameKeyHash or a time (Newcombe, paragraphs 0025, 0056-0059, 0065-0067).

In reference to Claims 20 and 21, Newcombe and Chang further disclose receiving a TimedNameKeyHash and a current time (Newcombe, paragraphs 0025, 0056-0059, 0065-0067).

In reference to Claim 22, Newcombe and Chang further disclose comparing a TimedNameKeyHash contained in the authentication request to a function of a stored NameKeyHash and a current time (Newcombe, paragraphs 0042, 0059, 0061-0062; Chang, column 4, lines 17-24; column 6, lines 2-3).

In reference to Claim 23, Newcombe and Chang further disclose receiving a current time and determining whether the received current time disagrees with another current time used by the authentication server, and sending the other current time to an originator of the authentication request when the received current time and the other current time disagree (Chang, column 7, line 58-column 8, line 2).

In reference to Claim 61, Newcombe discloses a computer system comprising an authentication server and a server coupled to the authentication server (paragraphs

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0037, 0054, 0063-0064), where the authentication server receives a client authentication request including client-specific data (paragraph 0025). However, Newcombe does not explicitly disclose a primary cache memory or further specific functions of the server as claimed.

Chang discloses a system including a primary cache memory (column 4, lines 17-24; column 6, lines 2-3) and where an authentication server compares the client specific data to data stored in the primary cache memory to determine whether the client specific data meet a first threshold of validity (column 4, lines 25-39); proceeds with authentication when it is determined that the client specific data meet the first threshold of validity (column 4, lines 25-39); and terminates authentication and denies the authentication request when it is determined that the client specific data do not meet the first threshold of validity (column 6, lines 47-50). Chang further discloses comparing the client specific data with data stored in a second cache memory to determine whether the client specific data meet a second threshold of validity and whether the client specific data correspond to an identity previously determined to be valid or invalid (column 4, lines 17-24; column 6, lines 2-3 and 47-50), transmitting a request for verification to a database containing client-specific data when the client specific data meet the second threshold, and terminating the authentication request when the client specific data correspond to an identity previously determined to be invalid (column 6, lines 47-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Newcombe's system by including a cache memory and a first threshold of validity to in order to streamline user validation without

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requiring the user to enter identification a second time (Chang, column 2, lines 55-63; column 3, lines 8-19).

In reference to Claim 62, Newcombe and Chang further disclose employing a first, plaintext portion of the client-specific data to obtain related encrypted client-specific data from the first cache memory (Newcombe, paragraphs 0025, 0056-0059, 0063, 0065-0067; Chang, column 4, lines 17-24; column 6, lines 2-3).

In reference to Claim 63, Newcombe and Chang further discloses storing at least a portion of the client specific data in a second cache memory along with an indication that the client specific data do not correspond to a valid client if it is determined that the client specific data do not meet the first threshold (Newcombe, paragraphs 0025, 0042, 0047-0048; Chang, column 4, lines 17-24; column 6, lines 2-3 and 47-50).

In reference to Claim 64, Newcombe and Chang further disclose that the client-specific data includes a NameKeyHash that is also a function of time (Newcombe, paragraphs 0025, 0056-0059, 0065-0067).

In reference to Claims 65 and 66, Newcombe and Chang further disclose that the client-specific data includes a TimedNameKeyHash and a current time (Newcombe, paragraphs 0025, 0056-0059, 0065-0067).

In reference to Claim 67, Newcombe and Chang further disclose that the client specific data stored in the first cache memory includes a NameKeyHash, and that the authentication server forms a TimedNameKeyHash from the NameKeyHash compares the formed TimedNameKeyHash to a portion of the client-specific data (Newcombe,

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paragraphs 0025, 0056-0059, 0063-0067; Chang, column 4, lines 17-24; column 6, lines 2-3).

In reference to Claim 68, Newcombe and Chang further disclose that the client specific data includes a current time, and that the authentication server determines whether the received current time disagrees with another current time used by the authentication server, and sends the other current time to an originator of the authentication request if the received current time and the other current time disagree (Chang, column 7, line 58-column 8, line 2).

In reference to Claim 69, Newcombe discloses a process for verification of a client authentication request by a server, where the method includes receiving, in the server, a client authentication request that includes client specific data that includes a name or hash of the name along with a client key (paragraphs 0025, 0056-0057, 0067); comparing the client specific data to stored data to determine whether the client specific data meet a first threshold of validity and proceeding with or terminating the procedure based on the determination (paragraphs 0063-0064; one or more content servers). However, Newcombe does not explicitly disclose the use of a cache memory.

Chang discloses a process for verification in which the system uses a cache memory (column 4, lines 17-24; column 6, lines 2-3). Chang further discloses that when it is determined that the client specific data meet the first threshold of validity, the authentication process proceeds (column 4, lines 25-39, where the client data must pass AAA server before proceeding to network access server); and when it is

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determined that the client specific data do not meet the first threshold of validity, a portion of the client specific data is stored in a second cache memory along with an indication that the client specific data do not correspond to a valid client (column 4, lines 17-24; column 6, lines 2-3 and 47-50) and the verification process terminates (column 6, lines 47-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Newcombe's method of authentication by including a cache memory and a first threshold of validity to in order to streamline user validation without requiring the user to enter identification a second time (Chang, column 2, lines 55-63; column 3, lines 8-19).

In reference to Claim 70, Newcombe discloses a process for authenticating a user that includes receiving an authentication request including first client specific data comprising at least one of a client name and proof of knowledge of a client key (paragraphs 0025, 0056-0059, 0065-0067); computing a NameHash using the received client name and a random session key (paragraphs 0065-0066); and using data corresponding to the NameHash to access data from a server (paragraphs 0063-0067). However, Newcombe does not explicitly disclose the use of a cache.

Chang discloses a process for authentication that uses a cache (column 4, lines 17-24; column 6, lines 2-3); accessing and comparing data to a first validity threshold (column 4, lines 25-39); and storing a portion of the client specific data in a second cache memory along with an indication that the client specific data do not correspond to a valid client (column 4, lines 17-24; column 6, lines 2-3 and 47-50) and terminating

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authentication when the first validity threshold data do not match the first client data (column 6, lines 47-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Newcombe's method of authentication by including a cache memory and a first threshold of validity to in order to streamline user validation without requiring the user to enter identification a second time (Chang, column 2, lines 55-63; column 3, lines 8-19).

In reference to Claim 71, Newcombe and Chang further disclose storing the client key and a CredentialInvalidFlag in a second cache memory when the first validity data do not match the first client data (Newcombe, paragraphs 0063-0065; Chang, column 4, lines 17-24; column 6, lines 2-3).

In reference to Claim 72, Newcombe and Chang further disclose employing the client name to access second client validity data from a second cache memory when the first validity data do match the first client data (Newcombe, paragraphs 0063-0065; Chang, column 4, lines 17-24; column 6, lines 2-3).

In reference to Claim 73, Newcombe and Chang further disclose employing the client name to access second client validity data from a second cache memory when the first validity data do match the first client data, where the second client validity data include a stored copy of a client key (Newcombe, paragraphs 0063-0065; Chang, column 4, lines 17-24; column 6, lines 2-3).

In reference to Claim 74, Newcombe and Chang further disclose using a truncation of the NameHash to access first validity threshold data from a first cache

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memory (Newcombe, paragraphs 0063, 0065-0067, 0103, 0107; Chang, column 4, lines 17-39; column 6, lines 2-3).

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Sitaraman et al, US Patent 6668283, discloses a system having primary and secondary caches for authentication.
- b. Kou et al, US Patent 7216236, discloses a system for authentication where previously registered clients can be sent notifications of failure of verification.
- c. McDaniel et al, US Patent Application Publication 2003/0126464, discloses a system having a two level cache for authentication.

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

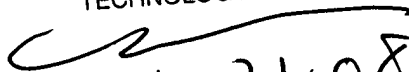
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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11/21/08